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## **REMARKS/ARGUMENTS**

The Examiner is thanked for the clarity and conciseness of the Office Action, and for the citation of references, which have been studied with interest and care.

These Remarks are submitted in response to the Office Action mailed August 20, 2003. In the Office Action, claims 1-44 stand rejected under 35 U.S.C. §102. Claims 1-44 remain pending in the present application.

Reconsideration of the rejections set forth above is respectfully requested in view of the following Remarks. In view of the following Remarks, Applicants respectfully request that the Examiner withdraw the rejections of the claims.

### **I. Rejections under 35 U.S.C. § 102**

Claims 1-44 stand rejected under 35 U.S.C. §102(e) as being anticipated by Naples et al. (hereinafter Naples). Further, claims 1-10, 16-24, and 30-39 stand rejected under 35 U.S.C. §102(e) as being anticipated by Miller. Additionally, claims 1-10, 16-24, and 30-39 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kennedy.

Anticipation requires that each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference. MPEP § 2131; Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). However, it is not enough that the prior art reference disclose all the elements in isolation. Rather as stated by the Federal Circuit, "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim*. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1985) (*emphasis added*). Thus, even if the prior art reference includes all the elements that are claimed, if the arrangement of the claimed elements is different from the arrangement of the prior art elements, anticipation will not be present. Moreover, as the Federal Circuit has stated, "[t]he *identical invention* must be shown in as complete detail as is contained in the...claim." MPEP § 2131; Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236. (*emphasis added*).

Applicants respectfully submit that the Office Action has misconstrued the teachings of Naples, Kennedy, and Miller. Particularly, Applicants respectfully submit that none of these references *disclose each and every element* of Applicants' independent claims 1, 16 and 30, *as arranged in the claims*, nor do any of these references set forth the *identical invention*. Therefore, anticipation is not present. Moreover, none of these references, alone or in combination, teach or suggest the elements of Applicants' independent claims, such that independent claims 1, 16, and 30 are not rendered obvious by these references.

Briefly, Applicants' invention as set forth in Applicants' independent claims 1, 16, and 30 generally relate to coupling *a musical instrument to a computing device utilizing an interface device* to allow a user to play *a musical instrument* in conjunction with a multimedia presentation...*a digitized audio signal of the musical instrument* is transmitted to the computing device to create a processed digital audio signal *of the musical instrument*...*a mixed digital signal of both the processed digital audio signal of the musical instrument and a digital audio file from the computing device* is created and converted into a mixed analog audio signal...*the digitized audio signal of the musical instrument and the mixed digital signal are controlled such that the mixed analog audio signal is properly timed for transmission* through the analog sound device to the user to allow the user to play a musical instrument in conjunction with the multimedia presentation of the audio file.

Thus, embodiments of the invention relate to utilizing *a real musical instrument* whose signal is processed and combined with a digital audio file *to create a mixed digital signal* to allow a user to *play a musical instrument* in conjunction with a multimedia presentation of an audio file.

In contrast, neither Naples, Kennedy, or Miller teach or suggest these limitations nor do they *teach the identical invention*. Particularly, both Naples and Miller are directed to utilizing *input devices to create input stimuli that are utilized by virtual instruments*. In fact, Naples and Miller do not utilize musical instruments to begin with. As to Kennedy, as will be discussed, Kennedy is directed to a different invention entirely.

Looking to Naples in particular, as set forth in paragraph 18 of Naples, Naples relates to an interactive karaoke system 10 that plays multi-part data files 14...The interactive karaoke system 10 is a multi-media, audio-visual music system that plays a musical accompaniment of a song while allowing a user 16 to play along with the song by singing the song's lyrics and playing various "virtual" instruments such as a guitar or drums. As set forth in paragraph 20 of Naples, if the user chooses to play a virtual instrument, a cue track 24 provides some sort of timing indication to a user 16 so that they know when to provide input stimuli to a virtual instrument...*This input stimuli can be in many forms, such as strumming a virtual guitar pick on a tennis racket, singing lyrics into a microphone, striking a pen onto a drum pad etc.* (emphasis added).

In fact, in paragraph 29, Naples details these various types of virtual instrument input devices 48<sub>1-n</sub> to virtual instruments such as a string input device 52 (e.g., an electronic guitar pick for a virtual guitar) and 54 (e.g., an electronic guitar pick for a virtual bass guitar).

As further detailed in Naples, in paragraph 36, during the performance of the song selected, a user 16 provides input stimuli to one or more of these virtual instrument input devices 48<sub>1-n</sub>. These input stimuli generate one or more input signals 80<sub>1-n</sub>, each of which corresponds to one of the virtual instrument input devices 48<sub>1-n</sub> being played by a user 16 (i.e., virtually played by a user)...These input signals 80<sub>1-n</sub> are each provided to the corresponding virtual instruments 50<sub>1-n</sub>...By providing these input stimuli, a user 16 can interact with the performance of a song being played by the interactive karaoke system 10 (emphasis added).

Thus, Naples does not teach or suggest an interface device that transmits a digitized audio signal of a *real musical instrument* to a computing device for digital signal processing *and creating a mixed digital signal of both the processed digital audio signal of the musical instrument and a digital audio file*. Moreover, Naples does not teach or suggest the further limitations of *the digitized audio signal of the musical instrument and the mixed digital signal being controlled such that the mixed analog audio signal is properly timed for transmission through the analog sound device to the user to allow the user to play a musical instrument in conjunction with the multimedia presentation of the audio file*.

Similar to Naples, Miller also does not teach Applicants' claimed invention of independent claims 1, 16, and 30, nor does it teach the *identical invention*. In fact, Miller, similar to Naples, again deals with providing input stimuli to virtual instruments and does not deal with real musical instruments.

As stated in the Abstract of Miller, the system described therein allows non-musicians to follow along with a display that is based on the principals of musical notation, but is designed to be intuitive and requires no training to use...The player is guided through the steps of playing a rhythm along with a musical performance, and the system provides the illusion that the player is actually playing a melodic part on an instrument...In addition, the system indicates how closely the player is following the guide and it also scores the players performance.

To accomplish this, as set forth in Miller, a player 12 watches a display 6 for visual clues and listens to speakers 11 for audio queues...Based on this feedback, the player uses peripherals 10 to play a rhythm that corresponds to a musical performance being played by a digital processor...The peripherals 10 provide input to the computing device through a peripheral interface 7...Based on player performance information stored on local storage 9 and kept in memory 1, the computing device uses signals from the peripheral interface 7 to drive the generation of musical tones by the sound synthesis unit 8 and plays them through speakers 11...The player 12 hears these tones, completing the illusion that he or she has directly created these tones by playing on the peripherals 10. (Miller, column 7, lines 14-29) (emphasis added).

As further described in Miller, referring to Figure 2 of Miller, a number of different kinds of peripherals are disclosed that can be used to drive the peripheral interface 7...Some representative examples are a foot-operated pad 21, an electronic keyboard 22, a voice-operated microphone 23, a standard game controller 24...even a motion detector that attaches to the body could be used as an input peripheral. (Miller, column 7, lines 39-49) (emphasis added).

Again, Miller, as with Naples, does not teach or suggest an interface device that transmits a digitized audio signal of a *real musical instrument* to a computing device for digital signal processing and *creating a mixed digital signal of both the processed digital audio signal of the musical instrument and a digital audio file from the computing device*. Moreover, Miller does

not teach or suggest the further limitations of *the digitized audio signal of the musical instrument and the mixed digital signal being controlled such that the mixed analog audio signal is properly timed for transmission* through the analog sound device to the user to allow the user to play a musical instrument in conjunction with the multimedia presentation of the audio file.

Lastly, the Kennedy reference generally relates to computerized methods and systems for music training and more particularly to the use of a computer to synchronize multiple sources of sounds and images to an audio performance of a master recording to thereby instruct a student how to perform the master recording or some facsimile thereof. (Kennedy, column 1, lines 12-18).

Applicants respectfully submit that they can find no teaching or suggestion in Kennedy related to Applicants' invention of utilizing an interface device to transmit a digitized audio signal of a musical instrument to a computing device for digital signal processing and *creating a mixed digital signal of both the processed digital audio signal of the musical instrument and a digital audio file*. Moreover, Applicants respectfully submit that they can find no teaching or suggestion in Kennedy of the further limitations of *the digitized audio signal of the musical instrument and the mixed digital signal being controlled such that the mixed analog audio signal is properly timed for transmission* through the analog sound device to the user to allow the user to play a musical instrument in conjunction with the multimedia presentation of the audio file. Applicants respectfully requests that the Office Action particularly point to the sections of Kennedy that teach or suggest these limitations, as Applicants cannot locate them.

Thus, Naples, Miller, and Kennedy, alone or in combination, *do not disclose each and every* element of independent claims 1, 16, and 30, as arranged in the claims, nor do these references set forth the *identical invention* of independent claims 1, 16, and 30. Therefore, anticipation is not present. Further, Naples, Miller, and Kennedy do not teach or suggest, either alone or in combination, the elements of independent claims 1, 16, and 30, such that independent claims 1, 16, and 30 are not rendered obvious by these references.

Accordingly, Applicants respectfully submit that independent claims 1, 16 and 30 are allowable and should be moved to issuance. Moreover, Applicants respectfully request that

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Applicants' dependent claims, which are dependent from allowable base claims, should likewise be allowed and moved to issuance.

**CONCLUSION**

In view of the remarks made above, it is respectfully submitted that pending claims 1-44 define the subject invention over the prior art of record. Thus, Applicants respectfully submit that all the pending claims are in condition for allowance, and such action is earnestly solicited at the earliest possible date. The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application. To the extent necessary, a petition for an extension of time under 37 C.F.R. is hereby made. Please charge any shortage in fees in connection with the filing of this paper, including extension of time fees, to Deposit Account 02-2666 and please credit any excess fees to such account.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 11/19/2003

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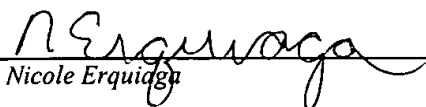
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